



March/April 2018

# Xplor

## MESSY, MARVELOUS MUD

GETTING DIRTY IS  
GOOD, CLEAN FUN





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Fold up our mini field guide and find 10 great snakes near you.

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Animals don't mind a mess. In fact, they love getting muddy.

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Although an eastern mole's eyes are nearly useless — they're fused shut and covered with fur — a mole's nose knows where to go.

 by Jim Rathert





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**ON THE COVER**  
**Fun in the Mud**  
*by David Stonner*

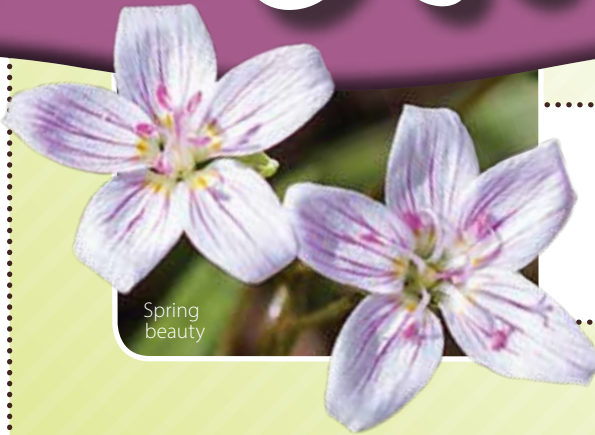


# GET OUT!

FUN THINGS TO DO  
AND GREAT PLACES  
TO DISCOVER NATURE

## TUNE YOUR EARS TO NATURE'S SOUNDTRACK.

Birds, frogs, toads, and insects start calling for mates this time of year. Can you name who's singing those love songs?



## TAKE TO THE WOODS FOR A WILDFLOWER WALK.

ID the blossoms you find at  
[mdc.mo.gov/field-guide](http://mdc.mo.gov/field-guide).



Mid-April is  
time to **HANG  
UP HUMMINGBIRD  
FEEDERS**. To make "nectar,"  
boil one part white sugar with  
four parts water, then let it cool.  
No need to add red food dye.

Fish are biting! **GRAB A GROWN-UP,  
AND FIND A GOOD FISHING SPOT**  
at [mdc.mo.gov/atlas](http://mdc.mo.gov/atlas).



## DON'T MISS MOREL SEASON.

These tasty mushrooms start popping  
up in mid-April. Always go with an  
experienced mushroom hunter,  
and never eat a mushroom unless  
you're sure it's edible.





# WHAT IS IT?

**DON'T KNOW?**

Jump to Page 20 to find out.



- ① Like a bat, I fly only at night.
- ② And I sail on the wind like a kite.
- ③ I live in the trees like my nut-loving kin.
- ④ But I also eat bugs like a robin or wren.



# Into the WILD pond edge

**P**ull on your rubber boots and grab a dip net. It's time to explore the wild edge where land and water meet.

## Listen

When startled, young **bullfrogs** squeak out high-pitched yelps as they hop to safety. When they're looking for mates, male bullfrogs make calls that sound like deep, rumbling burps.

## Take a Closer Look

If you swish a dip net through the water, you might catch a baby dragonfly, called a **nymph**. Nymphs spend their time underwater hunting for small aquatic creatures. When a nymph is ready to change into an adult, it crawls out of the water and anchors its claws into a plant. The nymph's skin splits open, and an adult dragonfly wiggles out.

## LOOK

**Tadpoles** have gills that they use to breathe water. As a tadpole grows, hind legs form and its tail shrinks. Soon, front legs and lungs form. At this stage, the baby frog or toad leaves behind its life underwater and starts breathing air.

## Did You Know?

### Bullfrogs

have big mouths and big appetites. They'll eat anything they can cram into their cavernous pie holes, including crayfish, minnows, mice, shrews, songbirds, young snakes, and even smaller bullfrogs.





Twelve-spotted skimmer



Green darner



Blue dasher



Eastern pondhawk



Common white-tail

## LOOK

**Dragonflies** might be the deadliest hunters in the animal kingdom. Studies have shown they catch nearly 95 percent of the insects they pursue. You can find many kinds of dragonflies patrolling a pond. Here are a few common ones to look for.

## Smell

**Sweet flag**, also known as calamus, looks a lot like a clump of cattails. But it's easy to tell the two plants apart. Just crush a leaf and sniff. If it smells spicy or like citrus, it's sweet flag.

Eggs: Jeffrey T. Briggler

Frog eggs



Toad eggs



Salamander eggs



## What Happened Here?

You found amphibian eggs, but what kind? Here's an easy way to tell. Frog eggs usually look like a cluster of clear grapes. Toad eggs look like long strings. Salamander eggs often look like a clump of clear jelly with seeds, and you can't usually tell where one egg ends and another begins.

## LOOK

When basking on a log, turtles often stretch out their legs to absorb as much sunshine as possible. This raises the turtle's temperature and helps its body produce vitamin D.

## Did You Know?

Red-eared sliders are named for their talent of sliding quickly off of logs when approached.




Red-eared slider





Eastern hog-nosed snake

by Bonnie Chasteen



Prairie ring-necked snake

# Snakes ARE GREAT!

Are you afraid of snakes? Some people are. They think these long, limbless reptiles are out to bite them. But most snakes will avoid humans if they can. Snakes do eat meat, but they prefer small prey they can swallow, like rodents, frogs, and bugs. In fact, it's their job to help keep prey critters in check. We think that's pretty great! If March and April are warm, you can expect to see snakes appearing around rocky areas and woodpiles statewide. Learn to identify 10 great Missouri snakes this spring.



Eastern milksnake

## But First, Make This Field Guide



- 1 Cut out the next two pages along the dotted lines.
- 2 Fold each cutout down the middle.
- 3 Stack the cutouts so the pages are in numerical order.
- 4 Staple the cutouts together along the middle between pages 8 and 9.
- 5 You're ready to spot some snakes!





Rough greensnake



mdc.mo.gov



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# YOU DISCOVER SHOW-ME Serpents



Eastern gartersnake

A MINI FIELD GUIDE  
TO 10 GREAT SNAKES

1

## Speckled Kingsnake

Nonvenomous



When threatened, this beautifully patterned, medium-to-large constrictor will vibrate its smooth tail like a rattlesnake.

**Habitat and Food:** Common on rocky, wooded hillsides or near farm buildings statewide. Secretive, it takes shelter under rocks, logs, boards, and in small critters' burrows. It eats mice, lizards, and other snakes, including venomous copperheads, cottonmouths, and rattlesnakes.



This snake is immune to Missouri's venomous snakes. When handled, it may try to bite and smear stinky musk on its attacker.

rattles against each other. Some nonvenomous snakes will also vibrate their tails if alarmed. But don't take chances. If you see or hear the rattling tail, back away as fast as you can. Third, if you encounter a dark, coiled snake with its white mouth wide open, stay away! It's a cottonmouth.



Cottonmouth



Many snakebites occur when people try to catch or kill a snake. Only three snakebite deaths have been recorded in Missouri.

### Shy, Sensitive Types

Snakes will strike if cornered or surprised, but they will avoid humans and other predators if they can. They prefer out-of-the-way places where they can hide and stalk prey. Snakes are also sensitive to things that hurt them, like mistreatment, pollution, pesticides, disease, and busy roads. Here are two simple ways to help Missouri's snakes.

**Don't collect snakes for pets.** They take a lot of special care, and they often die in captivity. Leaving snakes in the wild ensures all Missouri kids will have cool snakes to see.

**Learn to live with snakes in your yard.** Snakes don't ask for much. A small pile of brush, a few stones, a bit of garden wall away from your house is all they need. In return, they will keep rodents, bugs, and, in some cases, other snakes from eating your garden or invading your basement or attic.

3

14



## Spot 'em, Snap 'em, and Leave 'em be



Missouri has 43 kinds of snakes. They should not be collected or hunted. That's partly

because too many people have killed them or taken them to keep or sell as pets. Mistreatment and poaching leaves very few wild snakes to keep their kind alive and thriving on Missouri's landscape. The best way to enjoy Missouri's wild snakes is to spot them and snap their photos. This way, nobody gets hurt, and the snakes stay where they belong.

The best time of day to spot snakes is morning or early evening when the temperature is between 60 and 85 degrees. Look for them around brush piles, rock piles, and along streams.

### Approach with caution!

Most of Missouri's snakes are harmless to humans, but a few have fangs and venom that can hurt you. Missouri's copperhead, cottonmouth, western pygmy rattlesnake, massasauga rattlesnake, and timber rattlesnake all are venomous.



Eastern copperhead

## Snake Eyes

How do you tell the difference between Missouri's venomous snakes and nonvenomous snakes? Look into their eyes (but not too close!). The pupils of a venomous snake's eyes are vertical slits. The pupils of nonvenomous snakes' eyes are round. Second, check the tail. All rattlesnakes' tails end with loosely attached hollow segments called rattles. When a rattlesnake is alarmed, it will vibrate its tail, shaking the



2



## How do Snakes Survive?

A snake is basically a muscular tube with a mouth on one end and a vent on the other. No arms, legs, paws, or claws. Yet snakes have been around since dinosaurs roamed the Earth. How do they survive?

**Loco Motion** Snakes can travel across land, through water, and even up trees! Scientists have identified five different ways snakes move (and all those ways have long, twisty names). Some snakes specialize in one kind of locomotion, and most snakes can use most or all five kinds of movement if needed. Finely tuned locomotion is a successful way of finding prey and mates — and avoiding predators!



Western ratsnake

**Hiding in Plain Sight and Signaling Danger** Snakes come in an amazing variety of patterns and colors. Skin with a mottled pattern can help a snake hide in leaves or among rocks, making it easy to avoid detection and ambush prey. Bright colors and bold patterns can also signal danger, telling potential attackers to "back off!"



**Mighty Mouth** A snake's unique forked tongue is actually a scent collector. When a snake flicks its sticky tongue, odor particles cling to it. Then the snake inserts its tongue into a nasal cavity inside the top of its head, where it senses the odor. If something smells like food or a mate, the snake moves toward it.



4

Nonvenomous

## Western Ratsnake



Often called the "black snake," the western ratsnake is one of our state's largest and most familiar snakes. Generally shiny black, but some will show dark-brown blotches. The skin between the scales along the sides may be red.

**Habitat and Food:** Common statewide on rocky, wooded hillsides and wooded areas along streams and rivers. They take shelter in brush piles, hollow trees, farm buildings, and old houses where mice are plenty. These constrictors eat a variety of rodents, bats, and small birds. They are excellent climbers and often climb trees to raid bird nests.



This snake can grow to be 6 feet long and live up to 25 years.

15

Nonvenomous

## Prairie Ring-Necked Snake



Full-grown, this little snake seldom exceeds 14 inches. But, like some of its larger cousins, it uses mimicry to bluff its predators. Its belly ranges from yellow to red with black speckles. When threatened, it will flip over, curl its tail into an alarming red corkscrew, and hide its head under its coils.

**Habitat and Food:** Dry, rocky areas in prairies, woods, and pastures. There they find prey — primarily earthworms, but also slugs, soft-bodied insects, and small salamanders.



This snake has backward-pointing fangs that inject a venomlike substance into its small prey animals, but its mouth is too small to bite people.

13



# Northern Watersnake

Nonvenomous



Missouri's most common kind of watersnake is found statewide. Because it's large, dark, and lives along lakes, swamps, and streams, it is often mistaken for the venomous western cottonmouth.

**Habitat and Food:** In warm weather, they bask on branches, logs, or rocks along the water's edge in and near creeks, rivers, ponds, lakes, and swamps. They eat fish, frogs, tadpoles, toads, and salamanders.



This snake is nonvenomous, but it will bite viciously if captured and ooze a stinky musk from glands near the base of its tail.

12



Another mouth marvel that aids snakes' survival is super-flexible jaws. A snake can open its jaws wide enough to take prey much larger than its own diameter.

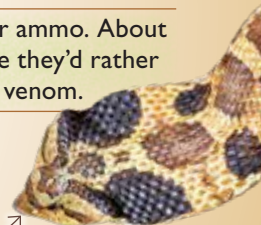
Snakes have three ways of subduing prey. Venomous snakes deliver a deadly bite. Some nonvenomous snakes overpower their prey and start swallowing it alive. Nonvenomous constricting snakes, like western ratsnakes, catch and hold their prey in heavy coils. Once prey is inside a snake's expandable jaws, its backward pointing teeth keep the animal headed into the serpent's stomach.



Venomous snakes conserve their ammo. About 1/4 of their bites are "dry" because they'd rather scare you away than waste precious venom.

**Body Bluffing** Some of snakes' sneakiest adaptations are behaviors in which they pretend to be something they're not.

The harmless **eastern hog-nosed snake** can fake being a big, bad cobra, complete with a spreading neck and threatening hiss. If that bluff doesn't work, the hog-nose can fake its own death. It flips over on its back, mouth open, twisting and thrashing, and then it lies limp. Leave it alone a few minutes, and it will raise its head and slither away.



5

# Eastern Yellow-Bellied Racer

Nonvenomous



This long, slim nonvenomous snake acts like part rattlesnake and part lightning. When approached, it shakes its pointed tail to rattle the leaves, then it streaks off through the woods before you can say, "What the heck was that?!"

**Habitat and Food:** Prairies, woods, and old fields where they can shelter under rocks and mammal burrows. They feed on frogs, lizards, small snakes, small rodents, birds, and insects. They use their speed and agility to overtake prey — as well as to escape their own predators.



Racers have large eyes, keen eyesight, and the ability to lift their heads and "periscope" their surroundings.

10

# Eastern Gartersnake

Nonvenomous



Generally 18–26 inches long, the shy eastern gartersnake has three yellow stripes — one along its back and two on either side. The red-sided gartersnake is found in the western half of the state, and it has red or orange skin that shows along its sides.

**Habitat and Food:** Found in a variety of habitats statewide. They favor areas near water and take shelter under boards, rocks, and brush piles. They eat frogs, tadpoles, salamanders, earthworms, small mice, and other kinds of small snakes.



Like many kinds of harmless snakes, gartersnakes will bite. They will also smear foul-smelling musk on attackers.

7



# Eastern Copperhead

Venomous



Their copper-colored camouflage pattern helps them hide in dead leaves, and they will usually remain motionless when encountered. They're not aggressive, and they seldom strike unless provoked. Young copperheads are born live and use their yellow tail as a lure to attract small frogs or lizards.

**Habitat and Food:** Rocky hillsides and stream beds, forest edges, and abandoned farm buildings. They feed on mice, lizards, frogs, small birds, insects, and sometimes small snakes.



Missouri's most common venomous snake also has the least-toxic venom. To avoid its bite, look where you step, wear sturdy shoes, and don't stick your hands under rocks or logs.

6

# Rough Greensnake

Nonvenomous



This long, slender snake occurs throughout the southern two-thirds of the state, but it often goes unseen. With its bright green color, it blends perfectly with its leafy surroundings.

**Habitat and Food:** The leaves of bushes, vines, and low-hanging branches above streams and lakes. It preys on spiders and insects, especially grasshoppers, crickets, and smooth caterpillars.



This mild-mannered snake seldom bites and often freezes when approached.

11

# Eastern Hog-nosed Snake

Nonvenomous



Also known as the puff adder, this snake is harmless to humans. It has a heavy body and an upturned snout. It can bluff predators like mammals and birds of prey with a display of neck-spreading and hissing or agonized thrashing and playing dead.

**Habitat and Food:** Sandy or loose soils in floodplains, old fields, open woods, and rocky hillsides statewide. They feed chiefly on toads, but will take frogs and salamanders.



The hog-nosed snake comes in a variety of colors and patterns, often resembling a venomous snake.

8

# Eastern Milksnake

Nonvenomous



Like the hog-nosed snake, milksnakes mimic venomous snakes to scare off predators. The red-marked milksnake is actually a constrictor that looks like a deadly coral snake, which doesn't occur in Missouri.

**Habitat and Food:** Milksnakes don't drink milk, but they may hang out in barns, where they hunt for mice. Secretive and seldom-seen, milksnakes live among rocks and forest edges.



Milksnakes are part of the kingsnake family, which have the ability to eat other snakes, even the occasional venomous snake.

9



# DOWN WITH GETTING DIRTY

These animals don't mind a mess. In fact, they love oozy, gooey, sticky, squishy, grungy, gloppy, mucky, *marvelous* mud!

by Matt Seek

## MUD, CRANKS UP THE CROAKING

Most of the time, this spadefoot toad hides underground where it's cool and wet. The thumb-sized amphibian digs a burrow using shovel-like spurs on its hind feet and creeps out at night to eat insects and worms. But when warm spring rains start falling, male spadefoots pop out and start calling. Their calls attract mates, and the puddles made by the rain provide a place for females to lay eggs. The eggs hatch in a few days, and the tadpoles turn quickly into young spadefoots — before the puddles dry up.





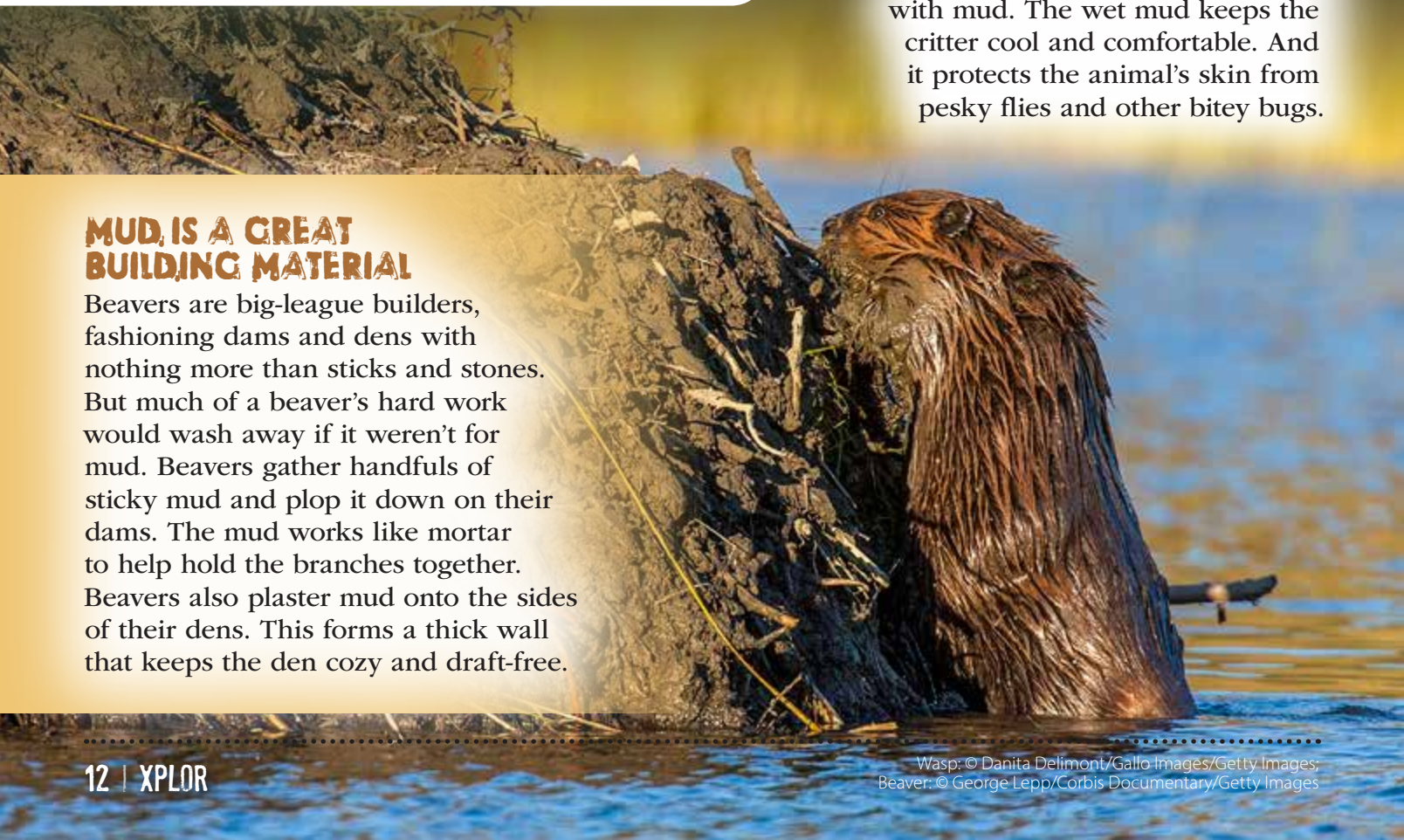
### **MUD, MAKES A NICE NURSERY**

This wasp isn't making mud balls to play *buzzketball*. She's gathering mud for a nursery. The wasp flies the balls of mud, one by one, back to where she wants to build a nest. There, on the side of a building, cave, or cliff, she molds the mud into hollow tubes. When she finishes a tube, she gathers spiders and stuffs them inside. Each spider gets stung so it can't move. The wasp lays an egg atop the pile of stunned spiders and caps the tube with mud. When the egg hatches, the baby wasp will have fresh spiders to eat.



### **MUD, KEEPS CRITTERS COOL**

It's hot. But this black bear can't go inside and crank up the AC. So what's a sun-baked bear supposed to do? Wallow in the mud, of course. Many animals — including bears, coyotes, cows, and pigs — enjoy rolling in a puddle until they're covered from snout to tail with mud. The wet mud keeps the critter cool and comfortable. And it protects the animal's skin from pesky flies and other bitey bugs.



### **MUD, IS A GREAT BUILDING MATERIAL**

Beavers are big-league builders, fashioning dams and dens with nothing more than sticks and stones. But much of a beaver's hard work would wash away if it weren't for mud. Beavers gather handfuls of sticky mud and plop it down on their dams. The mud works like mortar to help hold the branches together. Beavers also plaster mud onto the sides of their dens. This forms a thick wall that keeps the den cozy and draft-free.





### **MUD MAKES NIFTY NESTS**

These cliff swallows are gathering mouthfuls of mud — but not to eat. (That would be gross.) The birds mold the mud into pellets and stick the pellets to the side of a cliff (or under a bridge). Pellet by pellet, the birds build volcano-shaped nests in which to raise their babies. Some cliffs may have hundreds of nests packed together in the same spot. It takes about 1,000 pellets — and 1,000 trips to the mudhole — to finish a single nest.



### **MUD HIDES YUMMY THINGS TO EAT**

The oozy mud of a marsh is jam-packed with all sorts of creepy crawlies, such as insects, worms, and snails. Yum! Shorebirds, like this Wilson's snipe, wade through the muck and stick their long beaks into the glop to slurp up snacks. The tip of a snipe's super-sized schnoz can be opened while the rest of its beak stays closed. The tip is also sensitive, which helps the hungry bird detect hidden prey.





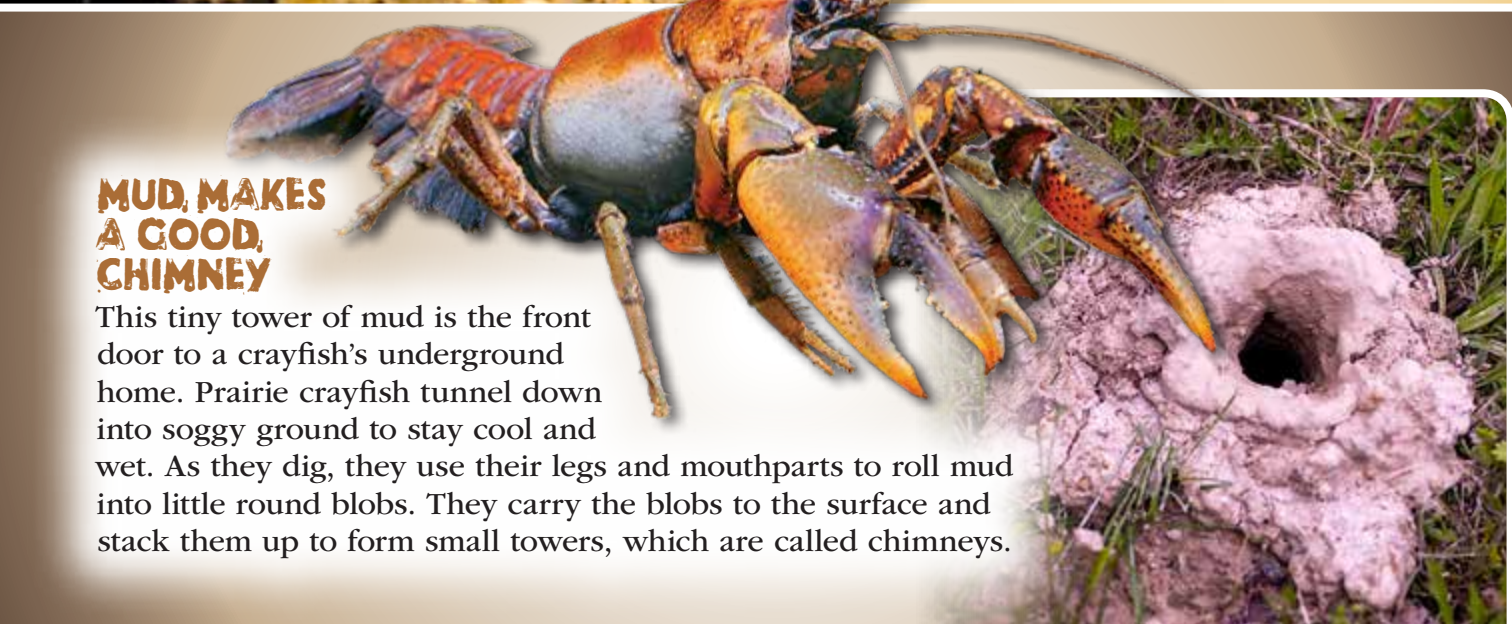


### **MUD, PROVIDES A COZY BED,**

Mussels, like this elephant's ear mussel, spend their days partially buried in the gravel, sand, and mud at the bottom of rivers and streams.

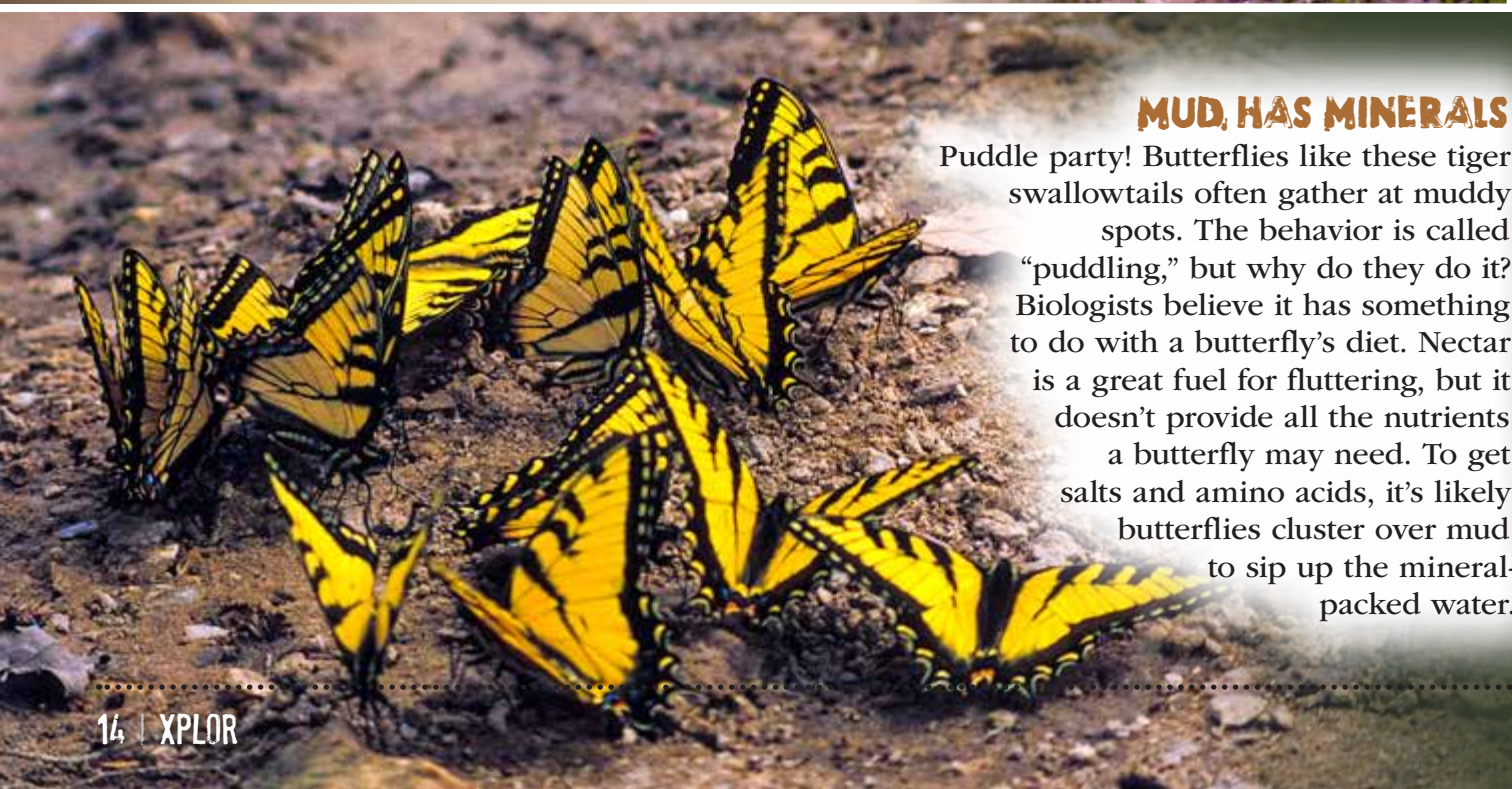
These clamlike animals are filter feeders.

They suck in water through a snorkel-like body part called a siphon, strain out bits of food floating in the water, and then squirt the water back out through a different siphon. By straining out lots of floaties, beds of mussels can make water cleaner.



### **MUD, MAKES A GOOD, CHIMNEY**

This tiny tower of mud is the front door to a crayfish's underground home. Prairie crayfish tunnel down into soggy ground to stay cool and wet. As they dig, they use their legs and mouthparts to roll mud into little round blobs. They carry the blobs to the surface and stack them up to form small towers, which are called chimneys.



### **MUD, HAS MINERALS**

Puddle party! Butterflies like these tiger swallowtails often gather at muddy spots. The behavior is called "puddling," but why do they do it? Biologists believe it has something to do with a butterfly's diet. Nectar is a great fuel for fluttering, but it doesn't provide all the nutrients a butterfly may need. To get salts and amino acids, it's likely butterflies cluster over mud to sip up the mineral-packed water.





## **MUD, IS FUN**

Wild critters aren't the only animals that love mud. Humans do, too. People in the southwestern U.S. and other parts of the world build houses out of mud. Some people slather mud on their faces to make their skin soft and wrinkle-free. Rice, which more than half of the world's people depend on for food, is grown in muddy, flooded fields. And playing in the mud ...

**WELL, THAT'S JUST GOOD, CLEAN FUN!**



THIS  
ISSUE:

Illustrated  
by David  
Besenger

# WESTERN MUDSNAKE VS THREE-TOED AMPHIUMA

## Secret Weapons

Deep in its upper jaw, the mudsnake has sharp fangs that can snag a slimy salamander.

## Underwater Night Stalker

The night-feeding mudsnake trolls the shallows, striking fast, and overpowering prey with heavy coils.

## Long on Slime

A large aquatic salamander, the amphiuma oozes thick mucus, making it difficult to grasp.

## Flee or Fight

Those little legs aren't much for motion, but the sleek salamander can swim fast. Behind its silly smile are sharp teeth it can use to fight for its life.

AND THE WINNER IS...

The battle between these big swamp things is epic, but the amphiuma can't slip the snake's sharp-toothed jaws and ever-tightening coils. The snake wins.



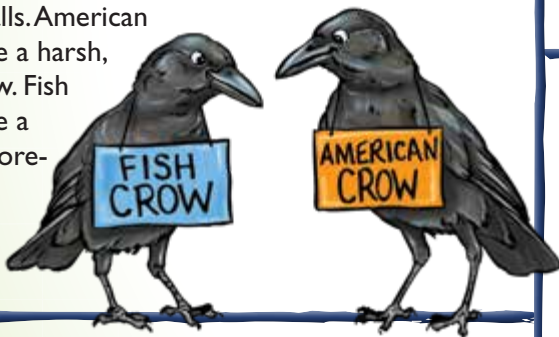
# STRANGE but TRUE!

YOUR GUIDE TO ALL THE  
**UNUSUAL, UNIQUE,**  
AND **UNBELIEVABLE** STUFF  
THAT GOES ON IN NATURE

**WARTY LEAF BEETLES** are the same size, shape, and color as caterpillar poop, which is called frass. The beetles' frassstastic disguise allows them to hide in plain sight from birds and other predators.



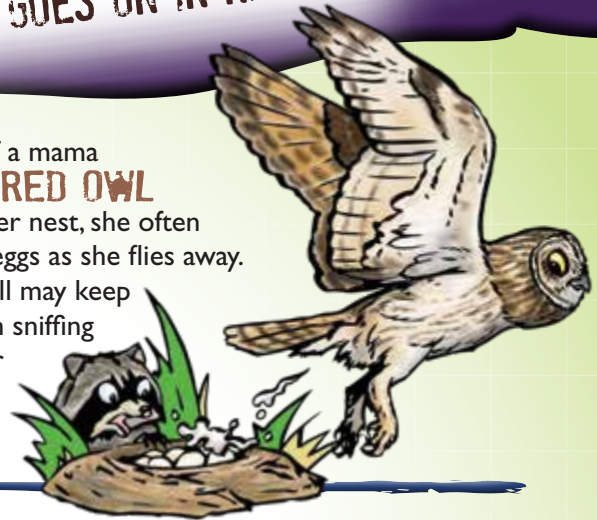
**AMERICAN CROWS** and **FISH CROWS** look nearly identical. Although the birds know who's who, the only reliable way for a person to tell them apart is by their caws — oops, calls. American crows have a harsh, rattling caw. Fish crows have a shorter, more-nasal call.



**FROGS** are capable of closing their eyes. They blink to protect their peepers and keep them moist. They shut their eyes when they swallow food. But as far as biologists can tell, frogs don't close their eyes when they sleep.

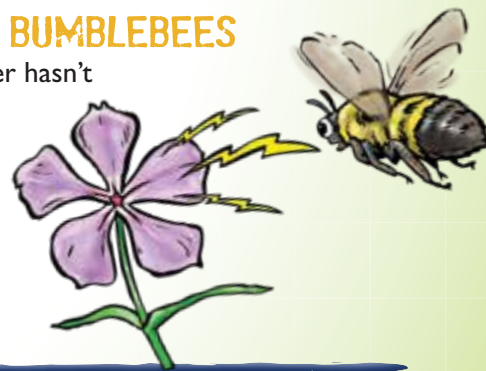


Bombs away! If a mama **SHORT-EARED OWL** is flushed off her nest, she often poops on the eggs as she flies away. The stinky smell may keep predators from sniffing out the nest or from eating the eggs.



Alvin? Simon? Theodore? In the spring and fall, **EASTERN CHIPMUNKS** sometimes gather together to sing at favorite sites in the forest. Their songs — which are simply quick, loud *chips* — may attract songbirds, who fly in to see what's up.

Shocking! Flowers talk to **BUMBLEBEES** using electricity. If a flower hasn't been visited recently by a bee, it gives off static electricity. The static tugs on tiny hairs on a bee's back, letting the insect know which flowers still have nectar.



Goodness snakes alive! The **BULLSNAKE** is Missouri's longest snake. It can reach a length of up to 8 feet. The **FLAT-HEADED SNAKE** is Missouri's shortest snake. It rarely grows longer than 8 inches.





# How To

## Tie Three Essential Knots

Few things are as handy in the outdoors as a well-tied knot. The right knot can secure a canoe to a dock, pitch a tent, join two ropes together, or rescue a victim from a fall. Learn how to tie three easy — but incredibly useful — knots.

### Sheet Bend

Got two ropes you want to tie together? This is the knot you use. It even works when one rope is thicker than the other.

- 1 Form a bend in the end of the thicker rope. (If both ropes are the same thickness, it doesn't matter which one you form into a bend.)



- 2 Bring the other rope up through the center of the bend, wrap it around and behind the back of the bend, and tuck it under itself.



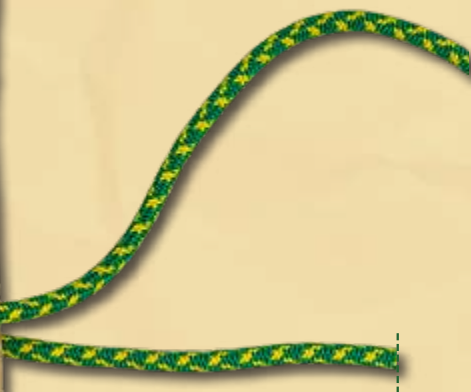
- 3 Tighten the knot by pulling on all four strands of rope at the same time.



### Two Half-Hitches

In knot-tying lingo, a hitch is a knot used to secure a rope to an object, such as a branch, pole, or ring. Two half-hitches is an all-purpose knot you can use to hang up a clothesline, tie a tent line to a stake, or secure a boat to a dock.

- 1 Wrap the rope around the object you want to tie it to.





# Bowline

The bowline makes a loop at the end of a rope that won't slip shut. You can use it for many things, including hanging a bear bag from a branch, anchoring a rope to a tree, or rescuing someone who has fallen down a cliff.

**1** Form a small loop. The part of the loop leading to the end of the rope needs to be on top. Leave enough rope below this small loop to form a bigger loop in the size that you need.

**2** Bring the end of the rope up through the small loop, go around the back of the rope, and then go back down through the small loop.

To remember this step, pretend that the end of the rope is a squirrel! The squirrel comes out of the hole, around the tree, and back in the hole.

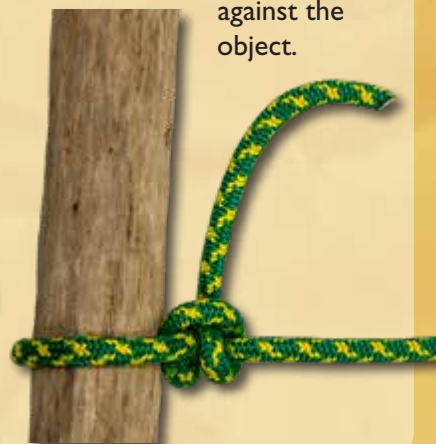
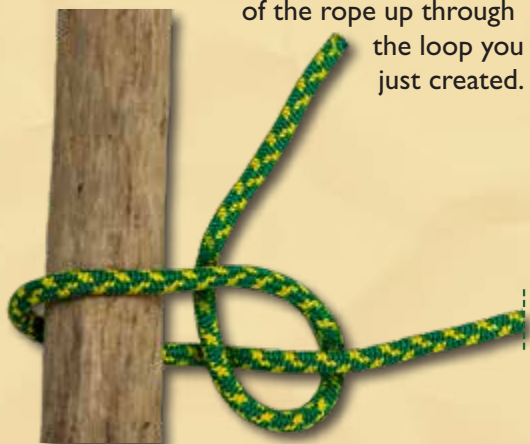
**Beware:** A bowline will stay tied as long as there is a load on the loop. But if the loop goes slack, the knot can come untied.

**3** Tighten the knot by pulling on the two strands that come through the small loop and the rope above the small loop all at the same time.

**2** Take the short end of the rope and wrap it around the longer, main part of the rope. Bring the end of the rope up through the loop you just created.

**3** Repeat the previous step to create the second of the two half-hitches.

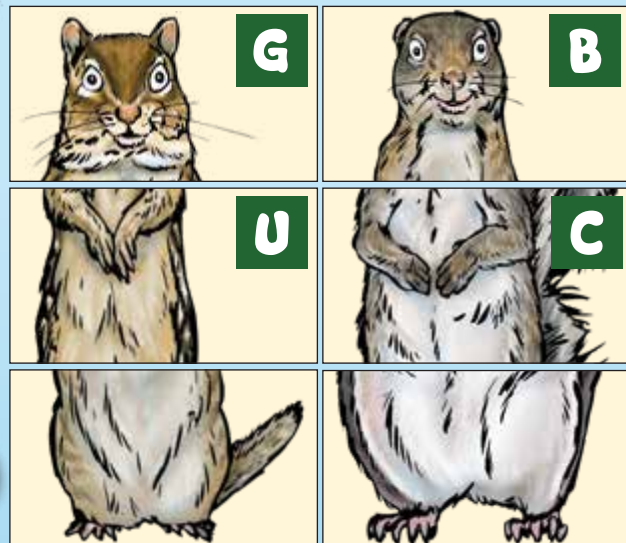
**4** Tighten the knot by pulling on the end of the rope. Slide the hitch up against the object.





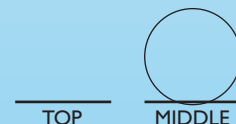
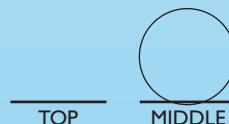


# Squirrel Scramble



Franklin's Ground Squirrel

Flying Squirrel



Missouri is home to seven kinds of squirrels. How well do you know the buck-toothed, bushy-tailed members of this family?

## Instructions

These squirrels have been scrambled. Their bottom parts are in the right spot, but their middles and tops are mixed up. Find each squirrel's middle and top section.

Write the letters that correspond to these sections under the squirrel's name.

If you match all the letters correctly, the circled letters will finish this fact:

## Fact

Squirrels belong to a group of mammals known for their large front teeth. The teeth are used to gnaw on wood, nuts, and other hard plants. In addition to squirrels, the group includes animals such as beavers, muskrats, porcupines, hamsters, and mice. Together, these mammals are known as ...

## WHAT IS IT?

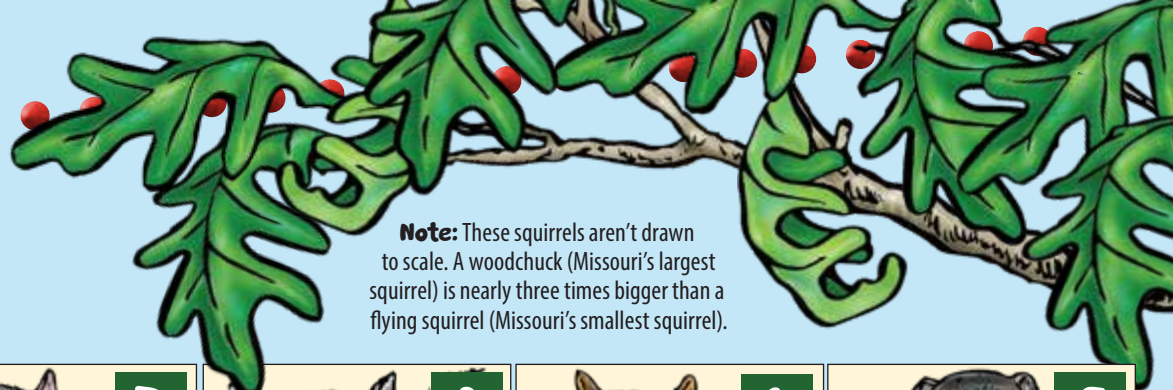
— FROM PAGE 3 —

front and back legs to stretch its loose flap of skin and soar like a furry kite. Like gray and fox squirrels, the flying squirrel eats nuts, and it also gobbles up beetles and moths. Learn more at [mdc.mo.gov/field-guide](http://mdc.mo.gov/field-guide).

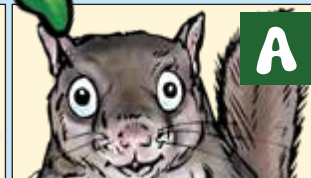
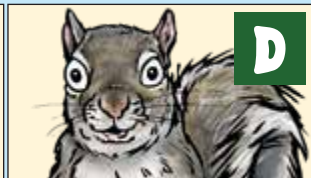
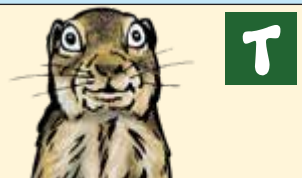




# E



**Note:** These squirrels aren't drawn to scale. A woodchuck (Missouri's largest squirrel) is nearly three times bigger than a flying squirrel (Missouri's smallest squirrel).



Gray Squirrel

Woodchuck

Eastern Chipmunk

13-lined Ground Squirrel

Fox Squirrel



## choosy Chipmunk

This chipmunk is a picky eater! It only eats acorns that have:

- A Stem • A cap • No holes

How many acorns can you find that satisfy all three of these requirements?





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## CRITTER CORNER

### Canada Goose Goslings



In March, Canada geese begin nesting along ponds, lakes, and swamps. Their eggs start hatching in mid-April. Babies, called goslings, are feathered in yellow down and can walk and swim hours after hatching. They stay with their parents for their first year of life. See how many goslings you can count this spring, but be careful. The parents are very protective, chasing, hissing, and flapping at anyone who comes near their babies! Learn more at [mdc.mo.gov/field-guide](http://mdc.mo.gov/field-guide).